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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,492	11/02/2001	Gregg E. Favalora	10857-011001	3409

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EXAMINER

REKSTAD, ERICK J

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/053,492

**Applicant(s)**

FAVALORA ET AL.

**Examiner**

Erick Rekstad

**Art Unit**

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-26 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 13 is/are rejected.
- 7) ☒ Claim(s) 8-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This is a first action for application no. 10/053,492 filed on November 2, 2001 in which claims 1-26 are present for examination.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5,801,761 to Tibor.

[claim 1]

As shown in Figures 7 and 8, Tibor teaches the a method for forming a three dimensional image by providing components of the image in a series of frames to an image space, the method comprising:

Scanning an image of a light shaping element (30) over an image space (40) wherein each of the plurality of zones (42) of the light shaping element is projected to each of a plurality of zones of the image space; and

Selectively illuminating portions (20) of the light shaping element zones during each of a plurality of frames during the scan, wherein each zone of the light-shaping element scatters the illumination and at least a portion of the scattered illumination provides a component of the three-dimensional image in the image space (Col 7 Line 40-Col 5 Line 8, Col 9 Lines 5-17, Figs 1, 7, 8).

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[claims 2-7]

As shown in Figure 10A, Tibor further teaches the scanning in the standard TV format, which scans vertically and horizontally (Col 4 Line 66-Col 5 Line 1-7, Col 9 Lines 29-41, Fig. 10A). As shown in the Figure 10A, the scanning is performed using the scanning optics 32 and 33 as required by claim 3.

[claim 13]

As shown in Figure 6, Tibor further teaches the scattering in the vertical dimension at the image space (Col 8 Line 64-Col 9 Line 4, Fig. 6).

***Allowable Subject Matter***

Claims 8-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 14-26 are allowed.

The following is an examiner's statement of reasons for allowance:

The present claims include novel and unobvious features in that the examiner was unable to find in several prior art searches. For example, the three dimensional display system containing both a spatial light modulator (210) and a image shaping device (220), wherein the modulator is not the image shaping device (Page 6 Lines 21-30). US Patent 5,801,761 to Tibor teaches a three dimensional display system (Col 9 Lines 5-17, Figs. 7 and 8). Tibor **does not teach** the use of two image shaping devices wherein the image shaping devices are the spatial light modulator and a diffuse screen. These features taken with the others in the claims define over the prior art.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 6,109,750 to Mayer et al.

US Patent 5,971,547 to Reilley.

US Patent 6,433,930 to Son.

US Patent 6,437,919 to Brown et al.

US Patent 6,154,259 to Hargis et al.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erick Rekstad whose telephone number is 703-305-5543. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 703-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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